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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/643,097	08/18/2003	Warran B. Lineton	71024-023	3347	
59582 DICKINSON V	7590 03/12/2007 WRIGHT PLLC		EXAMINER		
38525 WOODWARD AVENUE			DANIELS, MATTHEW J		
SUITE 2000 BLOOMFIELD HILLS, MI 48304-2970		ART UNIT	PAPER NUMBER		
			1732	•	
			MAIL DATE	DELIVERY MODE	
			03/12/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

## Advisory Action Before the Filing of an Appeal Brief

Application No.		Applicant(s)	
	10/643,097	LINETON, WARRAN B.	
	Examiner	Art Unit	
	Matthew J. Daniels	1732	

	Matthew J. Daniels	1732	
The MAILING DATE of this communication appe	ars on the cover sheet with the c	orrespondence add	ress
THE REPLY FILED 20 February 2007 FAILS TO PLACE THIS	APPLICATION IN CONDITION FO	R ALLOWANCE.	
1.  The reply was filed after a final rejection, but prior to or on this application, applicant must timely file one of the follow places the application in condition for allowance; (2) a No a Request for Continued Examination (RCE) in compliance time periods:	the same day as filing a Notice of ving replies: (1) an amendment, aff tice of Appeal (with appeal fee) in o ce with 37 CFR 1.114. The reply m	Appeal. To avoid aba fidavit, or other eviden compliance with 37 Cl	nce, which FR 41.31; or (3)
a) The period for reply expiresmonths from the mailing	=		
b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire is Examiner Note: If box 1 is checked, check either box (a) or a state of the control o	ater than SIX MONTHS from the mailin	g date of the final rejection	on.
TWO MONTHS OF THE FINAL REJECTION. See MPEP 7			
Extensions of time may be obtained under 37 CFR 1.136(a). The date have been filed is the date for purposes of determining the period of ex under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b) NOTICE OF APPEAL	tension and the corresponding amount shortened statutory period for reply orig than three months after the mailing da	of the fee. The appropri inally set in the final Office	iate extension fee ce action; or (2) as
2. The Notice of Appeal was filed on A brief in comp	diance with 27 CEP 41 27 must be	filed within two month	as of the date of
filing the Notice of Appeal (37 CFR 41.37(a)), or any exte a Notice of Appeal has been filed, any reply must be filed	nsion thereof (37 CFR 41.37(e)), to	avoid dismissal of th	
<u>AMENDMENTS</u>			
<ol> <li>The proposed amendment(s) filed after a final rejection,</li> <li>They raise new issues that would require further co</li> <li>They raise the issue of new matter (see NOTE belo</li> <li>They are not deemed to place the application in belonger</li> </ol>	nsideration and/or search (see NO w);	TE below);	
appeal; and/or (d) ☐ They present additional claims without canceling a		ected claims.	
NOTE: See Continuation Sheet. (See 37 CFR 1.1	16 and 41.33(a)).	•	
4. The amendments are not in compliance with 37 CFR 1.1.	<ol><li>See attached Notice of Non-Co</li></ol>	mpliant Amendment	(PTOL-324).
5. Applicant's reply has overcome the following rejection(s)	·		
<ol> <li>Newly proposed or amended claim(s) would be all non-allowable claim(s).</li> </ol>	lowable if submitted in a separate,	timely filed amendme	ent canceling the
7. For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is protected in the status of the claim(s) is (or will be) as follows:		ll be entered and an e	explanation of
Claim(s) allowed: Claim(s) objected to:			1
Claim(s) rejected: <u>1-9</u> .			
Claim(s) withdrawn from consideration:	•		
AFFIDAVIT OR OTHER EVIDENCE			
<ol> <li>The affidavit or other evidence filed after a final action, bu because applicant failed to provide a showing of good and was not earlier presented. See 37 CFR 1.116(e).</li> </ol>			
9. The affidavit or other evidence filed after the date of filing entered because the affidavit or other evidence failed to of showing a good and sufficient reasons why it is necessary	vercome all rejections under appe	al and/or appellant fai	ils to provide a
10. ☐ The affidavit or other evidence is entered. An explanation REQUEST FOR RECONSIDERATION/OTHER	n of the status of the claims after e	ntry is below or attach	ied.
11.   The request for reconsideration has been considered bu See the enclosed response to arguments.	t does NOT place the application in	n condition for allowar	nce because:
12. Note the attached Information Disclosure Statement(s).	(PTO/SB/08) Paper No(s)		
13. Other:			

Continuation of 3. NOTE: The claim amendments would require at least further consideration, and may require further search.

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## Response to Arguments

1. Applicant's arguments filed 20 February 2007 have been fully considered but they are not persuasive. The arguments appear to be on the following grounds:

- a) Claim 1, as amended, calls for a mixture of PTFE and susceptor, feeding into a compaction zone, shaping, providing a continuous flow, sintering by application of wave energy and drawing a vacuum on the mixture within the heating zone.
- b) Polyethylene (PE) and Polytetrafluoroethylene (PTFE) have loss indexes which are different by a factor of two. Thus, the materials are not equivalent.
- c) Claim 1 has been amended to recite the limitations of Claim 2.
- d) The '192 patent teaches processing articles in a vacuum compression mold of the desired shape under vacuum and then, upon removal from the hot mold, the molded article can be cooled and sintered.
- e) Applicant's traverse the rejections over Adams because Polyethylene (PE) and Polytetrafluoroethylene (PTFE) have loss indexes which are different by a factor of two. Thus, the materials are not equivalent. PTFE has by far the lowest loss index, making it the most improbably material listed to be dielectrically heated.
- 2. These arguments are not persuasive for the following reasons:
- a, c) The arguments are drawn to claim amendments which are not being entered. To the extent that the limitations of Claim 2 are argued, see (d) below.
- b, e) The Examiner maintains the position set forth in the rejection, namely that PE and PTFE are equivalent alternative materials with respect to their capacity for radio-frequency heating. While

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Applicant's remarks point to the factor of two (or ½) difference between the loss indexes of these materials, the remarks do not appear to consider that the materials are both recognized to have extremely small loss indexes compared to other polymeric materials, such as urea-formaldehyde and epoxy. One of ordinary skill in the art at the time of the invention would have found it obvious to apply the process of Thorsud to other compositions having a similar loss index in order to provide a similar heating effect. In particular, Thorsud teaches that "Broadly speaking, the inorganic RF sensitizers of the instant invention are useful in essentially any composition wherein the inorganic compound is not materially detrimental and which is subjected to RF radiation for heating purposes." (emphasis added, 4:62-66). The Examiner asserts that the '192 patent is non-limiting in its application, and its method is suggested for any material where the inorganic material is not materially detrimental.

d) To the extent that the arguments are directed at Claim 2, the Examiner respectfully disagrees with the Applicant's position regarding the teachings of the '192 patent. In particular, see Fig. 1, which shows "HOT ISOSTATIC MOLDING CYCLE WITH VACUUM" performed at temperatures of between 350 C and 400 C. Additionally, see column 5, lines 2-30. In particular, the '192 patent teaches that vacuum can be drawn while compressing the material at a temperature of 380 C to produce a molded article (5:10-20). Additionally, the '192 patent teaches, notably, that a temperature of only 327 C is needed to accomplish sintering (5:37-39). Thus, the '192 patent teaches application of vacuum on a mixture within the heating zone to extract air from the mixture at a temperature which inherently produces sintering (inherent in drawing a vacuum, concurrently compressing at high pressure and heating at 350-400 C, see 5:7-39).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Daniels whose telephone number is (571) 272-2450. The examiner can normally be reached on Monday - Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJD 3/6/07

MISO

CHRISTINA JOHNSON SUPERVISORY PATENT EXAMINER

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